World J Clin Cases 2022 July 6; 10(19): 6341-6758





#### **Contents**

Thrice Monthly Volume 10 Number 19 July 6, 2022

#### **MINIREVIEWS**

6341 Review of clinical characteristics, immune responses and regulatory mechanisms of hepatitis E-associated liver failure

Chen C, Zhang SY, Chen L

6349 Current guidelines for Helicobacter pylori treatment in East Asia 2022: Differences among China, Japan, and South Korea

Cho JH, Jin SY

6360 Review of epidermal growth factor receptor-tyrosine kinase inhibitors administration to non-small-cell lung cancer patients undergoing hemodialysis

Lan CC, Hsieh PC, Huang CY, Yang MC, Su WL, Wu CW, Wu YK

#### **ORIGINAL ARTICLE**

#### **Case Control Study**

Pregnancy-related psychopathology: A comparison between pre-COVID-19 and COVID-19-related social 6370 restriction periods

Chieffo D, Avallone C, Serio A, Kotzalidis GD, Balocchi M, De Luca I, Hirsch D, Gonsalez del Castillo A, Lanzotti P, Marano G, Rinaldi L, Lanzone A, Mercuri E, Mazza M, Sani G

6385 Intestinal mucosal barrier in functional constipation: Dose it change?

Wang JK, Wei W, Zhao DY, Wang HF, Zhang YL, Lei JP, Yao SK

#### **Retrospective Cohort Study**

6399 Identification of risk factors for surgical site infection after type II and type III tibial pilon fracture surgery Hu H, Zhang J, Xie XG, Dai YK, Huang X

#### **Retrospective Study**

6406 Total knee arthroplasty in Ranawat II valgus deformity with enlarged femoral valgus cut angle: A new technique to achieve balanced gap

Lv SJ, Wang XJ, Huang JF, Mao Q, He BJ, Tong PJ

6417 Preliminary evidence in treatment of eosinophilic gastroenteritis in children: A case series

Chen Y, Sun M

6428 Self-made wire loop snare successfully treats gastric persimmon stone under endoscopy

Xu W, Liu XB, Li SB, Deng WP, Tong Q

6437 Neoadjuvant transcatheter arterial chemoembolization and systemic chemotherapy for the treatment of undifferentiated embryonal sarcoma of the liver in children

He M, Cai JB, Lai C, Mao JQ, Xiong JN, Guan ZH, Li LJ, Shu Q, Ying MD, Wang JH

#### Contents

#### Thrice Monthly Volume 10 Number 19 July 6, 2022

6446 Effect of cold snare polypectomy for small colorectal polyps

Meng QQ, Rao M, Gao PJ

6456 Field evaluation of COVID-19 rapid antigen test: Are rapid antigen tests less reliable among the elderly?

Tabain I, Cucevic D, Skreb N, Mrzljak A, Ferencak I, Hruskar Z, Misic A, Kuzle J, Skoda AM, Jankovic H, Vilibic-Cavlek T

#### **Observational Study**

6464 Tracheobronchial intubation using flexible bronchoscopy in children with Pierre Robin sequence: Nursing considerations for complications

Ye YL, Zhang CF, Xu LZ, Fan HF, Peng JZ, Lu G, Hu XY

6472 Family relationship of nurses in COVID-19 pandemic: A qualitative study

Çelik MY, Kiliç M

#### **META-ANALYSIS**

6483 Diagnostic accuracy of  $\geq$  16-slice spiral computed tomography for local staging of colon cancer: A systematic review and meta-analysis

Liu D, Sun LM, Liang JH, Song L, Liu XP

#### **CASE REPORT**

6496 Delayed-onset endophthalmitis associated with Achromobacter species developed in acute form several months after cataract surgery: Three case reports

Kim TH. Lee SJ. Nam KY

6501 Sustained dialysis with misplaced peritoneal dialysis catheter outside peritoneum: A case report

Shen QQ, Behera TR, Chen LL, Attia D, Han F

6507 Arteriovenous thrombotic events in a patient with advanced lung cancer following bevacizumab plus chemotherapy: A case report

Kong Y, Xu XC, Hong L

6514 Endoscopic ultrasound radiofrequency ablation of pancreatic insulinoma in elderly patients: Three case

Rossi G, Petrone MC, Capurso G, Partelli S, Falconi M, Arcidiacono PG

6520 Acute choroidal involvement in lupus nephritis: A case report and review of literature

Yao Y, Wang HX, Liu LW, Ding YL, Sheng JE, Deng XH, Liu B

6529 Triple A syndrome-related achalasia treated by per-oral endoscopic myotomy: Three case reports

Liu FC, Feng YL, Yang AM, Guo T

6536 Choroidal thickening with serous retinal detachment in BRAF/MEK inhibitor-induced uveitis: A case report

Π

Kiraly P, Groznik AL, Valentinčič NV, Mekjavić PJ, Urbančič M, Ocvirk J, Mesti T

6543 Esophageal granular cell tumor: A case report

Chen YL, Zhou J, Yu HL

#### **Contents**

#### Thrice Monthly Volume 10 Number 19 July 6, 2022

6548 Hem-o-lok clip migration to the common bile duct after laparoscopic common bile duct exploration: A case report

Liu DR, Wu JH, Shi JT, Zhu HB, Li C

6555 Chidamide and sintilimab combination in diffuse large B-cell lymphoma progressing after chimeric antigen receptor T therapy

Hao YY, Chen PP, Yuan XG, Zhao AQ, Liang Y, Liu H, Qian WB

6563 Relapsing polychondritis with isolated tracheobronchial involvement complicated with Sjogren's syndrome: A case report

Chen JY, Li XY, Zong C

6571 Acute methanol poisoning with bilateral diffuse cerebral hemorrhage: A case report

Li J, Feng ZJ, Liu L, Ma YJ

6580 Immunoadsorption therapy for Klinefelter syndrome with antiphospholipid syndrome in a patient: A case report

Song Y, Xiao YZ, Wang C, Du R

6587 Roxadustat for treatment of anemia in a cancer patient with end-stage renal disease: A case report

Zhou QQ, Li J, Liu B, Wang CL

6595 Imaging-based diagnosis for extraskeletal Ewing sarcoma in pediatrics: A case report

Chen ZH, Guo HQ, Chen JJ, Zhang Y, Zhao L

6602 Unusual course of congenital complete heart block in an adult: A case report

Su LN, Wu MY, Cui YX, Lee CY, Song JX, Chen H

6609 Penile metastasis from rectal carcinoma: A case report

Sun JJ, Zhang SY, Tian JJ, Jin BY

6617 Isolated cryptococcal osteomyelitis of the ulna in an immunocompetent patient: A case report

Ma JL, Liao L, Wan T, Yang FC

6626 Magnetic resonance imaging features of intrahepatic extramedullary hematopoiesis: Three case reports

Luo M. Chen JW. Xie CM

6636 Giant retroperitoneal liposarcoma treated with radical conservative surgery: A case report and review of

literature

Lieto E, Cardella F, Erario S, Del Sorbo G, Reginelli A, Galizia G, Urraro F, Panarese I, Auricchio A

6647 Transplanted kidney loss during colorectal cancer chemotherapy: A case report

Pośpiech M, Kolonko A, Nieszporek T, Kozak S, Kozaczka A, Karkoszka H, Winder M, Chudek J

6656 Massive gastrointestinal bleeding after endoscopic rubber band ligation of internal hemorrhoids: A case

Ш

Jiang YD, Liu Y, Wu JD, Li GP, Liu J, Hou XH, Song J

#### Contents

#### Thrice Monthly Volume 10 Number 19 July 6, 2022

6664 Mills' syndrome is a unique entity of upper motor neuron disease with N-shaped progression: Three case

Zhang ZY, Ouyang ZY, Zhao GH, Fang JJ

- 6672 Entire process of electrocardiogram recording of Wellens syndrome: A case report Tang N, Li YH, Kang L, Li R, Chu QM
- 6679 Retroperitoneal tumor finally diagnosed as a bronchogenic cyst: A case report and review of literature Gong YY, Qian X, Liang B, Jiang MD, Liu J, Tao X, Luo J, Liu HJ, Feng YG
- Successful treatment of Morbihan disease with total glucosides of paeony: A case report 6688 Zhou LF, Lu R
- 6695 Ant sting-induced whole-body pustules in an inebriated male: A case report Chen SQ, Yang T, Lan LF, Chen XM, Huang DB, Zeng ZL, Ye XY, Wan CL, Li LN
- 6702 Plastic surgery for giant metastatic endometrioid adenocarcinoma in the abdominal wall: A case report and review of literature

Wang JY, Wang ZQ, Liang SC, Li GX, Shi JL, Wang JL

6710 Delayed-release oral mesalamine tablet mimicking a small jejunal gastrointestinal stromal tumor: A case report

Frosio F, Rausa E, Marra P, Boutron-Ruault MC, Lucianetti A

- 6716 Concurrent alcoholic cirrhosis and malignant peritoneal mesothelioma in a patient: A case report Liu L, Zhu XY, Zong WJ, Chu CL, Zhu JY, Shen XJ
- 6722 Two smoking-related lesions in the same pulmonary lobe of squamous cell carcinoma and pulmonary Langerhans cell histiocytosis: A case report

Gencer A, Ozcibik G, Karakas FG, Sarbay I, Batur S, Borekci S, Turna A

Proprotein convertase subtilisin/kexin type 9 inhibitor non responses in an adult with a history of 6728 coronary revascularization: A case report

Yang L, Xiao YY, Shao L, Ouyang CS, Hu Y, Li B, Lei LF, Wang H

- 6736 Multimodal imaging study of lipemia retinalis with diabetic retinopathy: A case report Zhang SJ, Yan ZY, Yuan LF, Wang YH, Wang LF
- 6744 Primary squamous cell carcinoma of the liver: A case report

Kang LM, Yu DP, Zheng Y, Zhou YH

6750 Tumor-to-tumor metastasis of clear cell renal cell carcinoma to contralateral synchronous pheochromocytoma: A case report

ΙX

Wen HY, Hou J, Zeng H, Zhou Q, Chen N

#### Contents

#### Thrice Monthly Volume 10 Number 19 July 6, 2022

#### **ABOUT COVER**

Editorial Board Member of World Journal of Clinical Cases, Abdulqadir Jeprel Naswhan, MSc, RN, Director, Research Scientist, Senior Lecturer, Senior Researcher, Nursing for Education and Practice Development, Hamad Medical Corporation, Doha 576214, Qatar. anashwan@hamad.qa

#### **AIMS AND SCOPE**

The primary aim of World Journal of Clinical Cases (WJCC, World J Clin Cases) is to provide scholars and readers from various fields of clinical medicine with a platform to publish high-quality clinical research articles and communicate their research findings online.

WJCC mainly publishes articles reporting research results and findings obtained in the field of clinical medicine and covering a wide range of topics, including case control studies, retrospective cohort studies, retrospective studies, clinical trials studies, observational studies, prospective studies, randomized controlled trials, randomized clinical trials, systematic reviews, meta-analysis, and case reports.

#### INDEXING/ABSTRACTING

The WJCC is now indexed in Science Citation Index Expanded (also known as SciSearch®), Journal Citation Reports/Science Edition, Scopus, PubMed, and PubMed Central. The 2021 Edition of Journal Citation Reports® cites the 2020 impact factor (IF) for WJCC as 1.337; IF without journal self cites: 1.301; 5-year IF: 1.742; Journal Citation Indicator: 0.33; Ranking: 119 among 169 journals in medicine, general and internal; and Quartile category: Q3. The WJCC's CiteScore for 2020 is 0.8 and Scopus CiteScore rank 2020: General Medicine is 493/793.

#### **RESPONSIBLE EDITORS FOR THIS ISSUE**

Production Editor: Xu Guo; Production Department Director: Xiang Li; Editorial Office Director: Jin-Lei Wang.

#### NAME OF JOURNAL

World Journal of Clinical Cases

#### **ISSN**

ISSN 2307-8960 (online)

#### **LAUNCH DATE**

April 16, 2013

#### **FREOUENCY**

Thrice Monthly

#### **EDITORS-IN-CHIEF**

Bao-Gan Peng, Jerzy Tadeusz Chudek, George Kontogeorgos, Maurizio Serati, Ja Hyeon Ku

#### **EDITORIAL BOARD MEMBERS**

https://www.wignet.com/2307-8960/editorialboard.htm

#### **PUBLICATION DATE**

July 6, 2022

#### **COPYRIGHT**

© 2022 Baishideng Publishing Group Inc

#### **INSTRUCTIONS TO AUTHORS**

https://www.wjgnet.com/bpg/gerinfo/204

#### **GUIDELINES FOR ETHICS DOCUMENTS**

https://www.wjgnet.com/bpg/GerInfo/287

#### **GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH**

https://www.wjgnet.com/bpg/gerinfo/240

#### **PUBLICATION ETHICS**

https://www.wjgnet.com/bpg/GerInfo/288

#### **PUBLICATION MISCONDUCT**

https://www.wjgnet.com/bpg/gerinfo/208

#### ARTICLE PROCESSING CHARGE

https://www.wjgnet.com/bpg/gerinfo/242

#### STEPS FOR SUBMITTING MANUSCRIPTS

https://www.wjgnet.com/bpg/GerInfo/239

#### **ONLINE SUBMISSION**

https://www.f6publishing.com

© 2022 Baishideng Publishing Group Inc. All rights reserved. 7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA E-mail: bpgoffice@wjgnet.com https://www.wjgnet.com



Submit a Manuscript: https://www.f6publishing.com

World J Clin Cases 2022 July 6; 10(19): 6710-6715

DOI: 10.12998/wjcc.v10.i19.6710

ISSN 2307-8960 (online)

CASE REPORT

## Delayed-release oral mesalamine tablet mimicking a small jejunal gastrointestinal stromal tumor: A case report

Fabio Frosio, Emanuele Rausa, Paolo Marra, Marie-Christine Boutron-Ruault, Alessandro Lucianetti

Specialty type: Radiology, nuclear medicine and medical imaging

#### Provenance and peer review:

Unsolicited article; Externally peer reviewed.

Peer-review model: Single blind

#### Peer-review report's scientific quality classification

Grade A (Excellent): 0 Grade B (Very good): B Grade C (Good): 0 Grade D (Fair): 0 Grade E (Poor): E

P-Reviewer: Jeruc J, Slovenia; Lewitowicz P, Poland

Received: January 24, 2022 Peer-review started: January 24,

First decision: March 12, 2022 Revised: April 13, 2022 **Accepted:** May 17, 2022 Article in press: May 17, 2022 Published online: July 6, 2022



Fabio Frosio, Emanuele Rausa, Alessandro Lucianetti, Department of General Surgery, ASST Papa Giovanni XXIII Hospital, Bergamo 24127, Italy

Paolo Marra, Department of Radiology, ASST Papa Giovanni XXIII Hospital, Bergamo 24127,

Marie-Christine Boutron-Ruault, Paris-Saclay University, UVSQ, Inserm, Gustave Roussy, Exposome and Heredity Team, Centre for Epidemiology and Population Health (CESP U1018), Villejuif 94800, France

Corresponding author: Fabio Frosio, MD, Surgeon, Department of General Surgery, ASST Papa Giovanni XXIII Hospital, Piazza OMS 1, Bergamo 24127, Italy. fabio.frosio10@gmail.com

#### **Abstract**

#### **BACKGROUND**

Enteric-coated medications are supposed to pass intact through the gastric environment and to release the drug content into the small intestine or the colon. Before dissolution of the enteric coating, they may appear hyperdense on computed tomography (CT). Unfortunately, few reports have been published on this topic so far. In this case report, the hyperdense appearance on contrastenhanced CT of an enteric-coated mesalamine tablet was initially misinterpreted as a jejunal gastrointestinal stromal tumor (GIST).

#### CASE SUMMARY

An asymptomatic 81-year-old male patient, who had undergone laparoscopic right nephrectomy four years earlier for stage 1 renal carcinoma, was diagnosed with a jejunal GIST at the 4-year follow-up thoraco-abdominal CT scan. He was referred to our hub hospital for gastroenterological evaluation, and subsequently underwent 18-fluorodeoxyglucose positron emission tomography, abdominal magnetic resonance imaging, and video capsule endoscopy. None of these examinations detected any lesion of the small intestine. After reviewing all the CT images in a multidisciplinary setting, the panel estimated that the hyperdense jejunal image was consistent with a tablet rather than a GIST. The tablet was an 800 mg delayed-release enteric-coated oral mesalamine tablet (Asacol®), which had been prescribed for non-specific colitis, while not informing the hospital physicians.

#### **CONCLUSION**

Delayed-release oral mesalamine (Asacol®), like other enteric-coated medications,

can appear as a hyperdense image on a CT scan, mimicking a small intestinal GIST. Therefore, a detailed knowledge of the patients' medications and a multidisciplinary review of the images are essential.

Key Words: Mesalamine; Enteric-coating; Asacol; Tablet; Gastrointestinal stromal tumor; Case report

©The Author(s) 2022. Published by Baishideng Publishing Group Inc. All rights reserved.

**Core Tip:** Enteric-coated tablets may appear as hyperdense images on computed tomography (CT) scan, and lead to misdiagnosis, for example of small intestinal gastrointestinal stromal tumors which usually show homogeneous enhancement on contrast-enhanced CT phases. Therefore, when observing small hyperdense lesions in the gastrointestinal tract on CT scan, physicians should be aware of possible radiopaque medications. A perfect knowledge of the patients' medical treatment (even occasional) and a multidisciplinary review of all the images are essential to avoid misdiagnosis and unnecessary investigations.

Citation: Frosio F, Rausa E, Marra P, Boutron-Ruault MC, Lucianetti A. Delayed-release oral mesalamine tablet mimicking a small jejunal gastrointestinal stromal tumor: A case report. World J Clin Cases 2022; 10(19): 6710-6715

**URL:** https://www.wjgnet.com/2307-8960/full/v10/i19/6710.htm

**DOI:** https://dx.doi.org/10.12998/wjcc.v10.i19.6710

#### INTRODUCTION

Enteric-coated tablets pass intact through the gastric environment, and release the drug content into the small bowel or the colon. Enteric-coating polymers have long been known to be radiopaque to some degree[1], and their computed tomography (CT) density can be high, even though this has little been reported so far in the literature.

Gastrointestinal stromal tumors (GISTs) are a group of mesenchymal tumors of the digestive tract that originate from the interstitial cells of Cajal; approximately 30% of them are malignant. GISTs usually appear as sharply demarcated submucosal or subserosal lesions within the gastrointestinal tract [2]. CT often provides both diagnosis and staging; after intravenous contrast, small-sized intestinal GISTs typically display strong homogeneous enhancement [3,4].

This report shows a case in which the hyperdense appearance on contrast-enhanced CT of an entericcoated delayed-release oral mesalamine tablet was misinterpreted as a small jejunal GIST.

#### CASE PRESENTATION

#### Chief complaints

An 81-year-old male patient was referred to our surgical outpatient clinic for a suspected jejunal GIST detected on thoraco-abdominal CT.

#### History of present illness

The patient was free of any symptom. Thoraco-abdominal CT scan was performed in another hospital as part of the follow-up of a previous renal cell carcinoma.

#### History of past illness

The patient's past medical history included hypertension, colonic diverticulosis, and right laparoscopic nephrectomy four years earlier for stage 1 renal cell carcinoma[5]; there had been no adjuvant chemotherapy, and no recurrence was detected at follow-up.

#### Personal and family history

No significant family histories were identified.

#### Physical examination

The patient was in good condition with weight within the normal range (body mass index: 22.4 kg/m²). Physical examination was absolutely normal. There was no abdominal mass on palpation.



#### Laboratory examinations

Routine laboratory tests, including tumor markers, were all within the normal range.

#### Imaging examinations

Thorax-abdomen CT scan revealed an 18 mm x 8 mm lesion in the wall of a jejunal loop, which displayed strong homogeneous contrast enhancement in the arterial and venous phases (250 Hounsfield Unit)[6] (Figure 1B and C), while it was isodense and barely visible in the pre-contrast and delayedcontrast phases (Figure 1A and D). In the CT report, the lesion was described as consistent with a GIST. Thus, the oncologist referred him to our hub hospital for gastroenterological assessment. This included 18-fluorodeoxyglucose positron emission tomography and abdominal magnetic resonance imaging, which both failed to detect any abnormal image. The patient also underwent gastroscopy, which was normal, and colonoscopy, where two adenomatous polyps of the right colon were resected, with lowgrade dysplasia on pathological examinations. Finally, video capsule endoscopy was also carried out and did not record any small-intestinal lesion.

#### FINAL DIAGNOSIS

The patient was subsequently referred for multidisciplinary assessment. CD-ROMs with CT images were kept for second radiological opinion and multidisciplinary team discussion of the case.

When reviewing the CT scan with the radiologists, hyperdense jejunal images were also visible in the pre-contrast and delayed-contrast phases (Figure 2), more proximal and distal respectively than the image initially reported at the arterial and venous acquisition phases. The dimensions and the CT density, on the other hand, were the same. This led to suspect a foreign body rather than a GIST.

A thorough medical history revealed that the patient had recently been prescribed delayed-release oral mesalamine 800 mg tablets (Asacol®) for non-specific colitis. The CT scan hyperdense images were consistent with images expected for an enteric-coated tablet.

#### TREATMENT

As the initial diagnosis of GIST was ruled out, no treatment was requested. Follow-up was continued as previously planned.

#### **OUTCOME AND FOLLOW-UP**

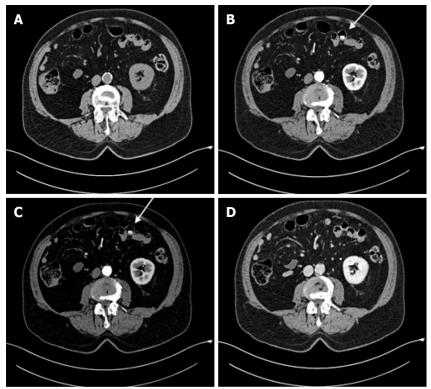
The 5-year follow-up thoraco-abdominal CT scan was performed after discontinuation of mesalamine and did not reveal any abnormal image, which further confirmed our reassessment of the case. Laboratory tests and tumor markers were still normal. Physical examination was normal as well.

#### DISCUSSION

Oral delayed-release mesalamine is an enteric-coated formulation releasing mesalamine in the terminal ileum and the colon; it is effective for mild to moderately active ulcerative colitis and active Crohn's disease[7]. Like other enteric-coated medications, it may appear hyperdense on CT scan, before dissolution of the enteric coating. Nevertheless, there are few reports in the literature on this topic and no specific restrictions on its administration before abdominal imaging. Sieron et al[8] recently investigated the CT density of frequently administered medications, but mesalamine was not included. A few cases have been reported in which the hyperdensity of a tablet led to a misdiagnosis, involving unnecessary investigations; the medications in question, however, were mainly iron[9] and potassium tablets[10,11].

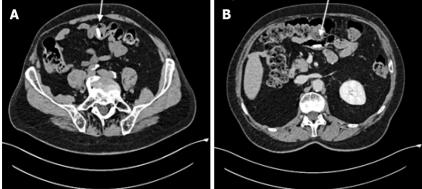
GISTs can occur anywhere along the gastrointestinal tract, most commonly in the stomach and small bowel. Small GISTs (< 2 cm) can be endoluminal and are often an incidental finding at CT, showing clear-cut shape and strong homogeneous contrast enhancement [12]. In particular, contrast enhancement has been reported to be inversely proportional to tumor diameter in intestinal GISTs[4]. This actually explains how a hyperdense tablet could have been misinterpreted as a small jejunal GIST on contrastenhanced CT scan. We report here for the first time a diagnostic error caused by the hyperdense appearance of a delayed-release mesalamine tablet.

In this case, however, the radiologist who first examined the images did not notice that the lesion was also visible on the pre-contrast scan, although in another jejunal loop. When hyperdense lesions are observed on contrast-enhanced CT, it is essential to determine their presence or absence in the pre-



DOI: 10.12998/wjcc.v10.i19.6710 Copyright ©The Author(s) 2022.

Figure 1 Abdominal contrast-enhanced computed tomography scan. A: Pre-contrast phase; B: Arterial phase; C: Venous phase; D: Delayed-contrast phase. A hyperdense jejunal image (white arrow) was observed in the arterial and venous phases.



DOI: 10.12998/wjcc.v10.i19.6710 Copyright ©The Author(s) 2022.

Figure 2 Revision of the abdominal computed tomography images. A: Pre-contrast phase; B: Delayed-contrast phase. The hyperdense jejunal image (white arrow) was found also in the pre-contrast and delayed-contrast phases, but in other jejunal loops.

contrast phase. In particular, if these lesions are gastric or intestinal, they should be carefully researched along the entire gastrointestinal tract; in fact, due to peristalsis, small foreign bodies may be found at slightly different levels during the different phases of the CT scan[13].

Along with the initial radiological assessment, it is crucial to address two other key points that could have helped the diagnostic process.

Firstly, the gastroenterologist who evaluated the patient had not obtained the CT images from the hospital where the examination had been performed, and decided to perform additional examinations on the basis of the CT report only. It is well recognized that obtaining all the images - and not just the report - of radiological examinations performed elsewhere is associated with higher quality of care[14]. Moreover, it has been shown that just including at least the most relevant images in the radiology reports is associated with higher physicians' confidence in decision-making and possibly changes in patient management[15]. Therefore, when a patient is referred from another center, the admitting physicians should be provided the images of all previous examinations, and easily request a second reading by another radiologist or a multidisciplinary assessment in case of any doubt. In the present case, such a procedure would have avoided unnecessary examinations.

Secondly, none of the four involved physicians (radiologist, oncologist, gastroenterologist, and surgeon) was aware that the patient had been taking mesalamine for some weeks. Patients' occasional pharmacological treatments may not be readily available during outpatient visits, and patients tend to forget or underreport them, giving priority to everyday routine treatments. This is why occasional medications should be thoroughly investigated as part of the pharmacological history, and always reassessed before instrumental examinations. In this case report, information about the patient's recent treatment with an enteric-coated tablet would definitely have helped in properly interpreting the CT scan.

#### CONCLUSION

Delayed-release mesalamine, like other enteric-coated preparations, is hyperdense on CT scan and may lead to misdiagnosis, for example of a small intestinal GIST. Therefore, when small hyperdense lesions in the gastrointestinal tract are detected, physicians should rule out radiopaque medications, by thoroughly investigating the patient's medical treatment (even occasional), and possibly performing a multidisciplinary imaging review.

#### **FOOTNOTES**

**Author contributions:** Frosio F collected the data and wrote the paper; Rausa E reviewed the literature; Marra P reviewed the CT images; Boutron-Ruault MC critically revised the manuscript; Lucianetti A gave the input in realizing this case report and critically revised it; and All authors gave their approval to the submitted version.

**Informed consent statement:** Informed written consent was obtained from the patient for publishing this case report of this report and any accompanying images.

Conflict-of-interest statement: The authors declare that they have no conflict of interest.

CARE Checklist (2016) statement: The authors have read the CARE Checklist (2016), and the manuscript was prepared and revised according to the CARE Checklist (2016).

Open-Access: This article is an open-access article that was selected by an in-house editor and fully peer-reviewed by external reviewers. It is distributed in accordance with the Creative Commons Attribution NonCommercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is noncommercial. See: https://creativecommons.org/Licenses/by-nc/4.0/

Country/Territory of origin: Italy

**ORCID number:** Fabio Frosio 0000-0002-1706-9149; Emanuele Rausa 0000-0001-6780-1783; Paolo Marra 0000-0003-4935-8110; Marie-Christine Boutron-Ruault 0000-0002-5956-5693; Alessandro Lucianetti 0000-0002-9035-697X.

S-Editor: Ma YJ L-Editor: A P-Editor: Ma YJ

#### REFERENCES

- Handy CA. Radiopacity of oral nonliquid medications. Radiology 1971; 98: 525-533 [PMID: 5544520 DOI:
- Schaefer IM, Mariño-Enríquez A, Fletcher JA. What is New in Gastrointestinal Stromal Tumor? Adv Anat Pathol 2017; 24: 259-267 [PMID: 28632504 DOI: 10.1097/PAP.000000000000158]
- King DM. The radiology of gastrointestinal stromal tumours (GIST). Cancer Imaging 2005; 5: 150-156 [PMID: 16361144 DOI: 10.1102/1470-7330.2005.0109]
- Inoue A, Ota S, Nitta N, Murata K, Shimizu T, Sonoda H, Tani M, Ban H, Inatomi O, Ando A, Kushima R, Watanabe Y. Difference of computed tomographic characteristic findings between gastric and intestinal gastrointestinal stromal tumors. Jpn J Radiol 2020; **38**: 771-781 [PMID: 32246352 DOI: 10.1007/s11604-020-00962-0]
- 5 Amin MB, Edge S, Greene F, Byrd DR, Brookland RK, Washington MK, Gershenwald JE, Compton CC, Hess KR, Sullivan DC, Jessup JM, Brierley JD, Gaspar LE, Schilsky RL, Balch CM, Winchester DP, Asare EA, Madera M, Gres, DM, Meyer LR. AJCC Cancer Staging Manual. Ed. 8 Cham, Switzerland: Springer; 2017
- DenOtter TD, Schubert J. Hounsfield Unit. 2021 Mar 16. In: StatPearls [Internet]. Treasure Island (FL): StatPearls

- Publishing; 2022 Jan- [PMID: 31613501]
- Prakash A, Markham A. Oral delayed-release mesalazine: a review of its use in ulcerative colitis and Crohn's disease. Drugs 1999; 57: 383-408 [PMID: 10193690 DOI: 10.2165/00003495-199957030-00013]
- 8 Sieron DA, Steib M, Suter D, Obmann VC, Huber AT, Ebner L, Inderbitzin D, Christe A. Computed tomography imaging for the characterisation of drugs with radiation density measurements and HU spectroscopy. Swiss Med Wkly 2018; 148: w14585 [PMID: 29376556 DOI: 10.4414/smw.2018.14585]
- 9 Florez MV, Evans JM, Daly TR. The radiodensity of medications seen on x-ray films. Mayo Clin Proc 1998; 73: 516-519 [PMID: 9621857 DOI: 10.4065/73.6.516]
- Onal B, Citgez S, Tansu N, Talat Z, Oner A. Tablets of the potassium citrate may cause a stone-like image: a case report. Urol Res 2009; 37: 165-168 [PMID: 19367401 DOI: 10.1007/s00240-009-0188-2]
- Commandeur JP, Metwaly A, Büchler L, Speiser J, Brander L, Reintam Blaser A. A Degrading Potassium Tablet Mimicking Active Gastric Bleeding in a Computer Tomographic Investigation. Case Rep Radiol 2020; 2020: 9791519 [PMID: 32257495 DOI: 10.1155/2020/9791519]
- Vernuccio F, Taibbi A, Picone D, LA Grutta L, Midiri M, Lagalla R, Lo Re G, Bartolotta TV. Imaging of Gastrointestinal Stromal Tumors: From Diagnosis to Evaluation of Therapeutic Response. Anticancer Res 2016; 36: 2639-2648 [PMID:
- 13 13 Campbell EA, Wilbert CD. Foreign Body Imaging. [Updated 2021 May 7]. StatPearls [Internet]. Treasure Island(FL): Stat Pearls Publishing 2021; Available from: https://www.ncbi.nlm.nih.gov/books/NBK470294/
- Jung HY, Gichoya JW, Vest JR. Providers' Access of Imaging Versus Only Reports: A System Log File Analysis. J Am Coll Radiol 2017; 14: 217-223 [PMID: 27475970 DOI: 10.1016/j.jacr.2016.06.014]
- Iyer VR, Hahn PF, Blaszkowsky LS, Thayer SP, Halpern EF, Harisinghani MG. Added value of selected images embedded into radiology reports to referring clinicians. J Am Coll Radiol 2010; 7: 205-210 [PMID: 20193926 DOI: 10.1016/j.jacr.2009.10.014]



### Published by Baishideng Publishing Group Inc

7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA

**Telephone:** +1-925-3991568

E-mail: bpgoffice@wjgnet.com

Help Desk: https://www.f6publishing.com/helpdesk

https://www.wjgnet.com

